REMARKS

Claim 2-21 were pending in this application.

Claims 2 and 12 have been rejected.

Claims 20-21 have been allowed.

Claims 3-11 and 13-19 have been identified as being allowable if rewritten in independent form.

No claims have been amended.

Claims 2-21 remain pending in this application.

Reconsideration and full allowance of Claims 2-21 are respectfully requested.

I. <u>ALLOWABLE CLAIMS</u>

The Applicant thanks the Examiner for the indication that Claims 20-21 are allowable. Claims 20 and 21 have not been amended and therefore remain in condition for allowance. The Applicant also thanks the Examiner for the indication that Claims 3-11 and 13-19 would be allowable if rewritten in independent form. Because the Applicant believes that Claims 3-11 and 13-19 depend from allowable base claims, the Applicant has not rewritten Claims 3-11 and 13-19 in independent form.

II. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 2 and 12 under 35 U.S.C. § 103(a) as being

unpatentable over U.S. Patent No. 5,475,823 to Amerson et al. ("Amerson") in view of U.S. Patent No. 6,360,314 to Webb, Jr. et al. ("Webb"). This rejection is respectfully traversed.

In ex parte examination of patent applications, the Patent Office bears the burden of establishing a prima facie case of obviousness. MPEP § 2142; In re Fritch, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a prima facie basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a prima facie case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of a patent. In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A prima facie case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second,

there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

The Office Action acknowledges that *Amerson* fails to disclose detecting an instruction that loads data from a first memory location "without computing an external memory address of [the] first memory location" as recited in Claims 2 and 12. The Office Action relies on *Webb* as disclosing these elements of Claims 2 and 12. (*Office Action, Pages 2-3, Paragraph 7*).

Webb recites a bypass mechanism for a computer system. (Abstract). The bypass mechanism includes a "store queue" (element 426) and a "store data buffer" (element 428). (Col. 5, Lines 49-54). The store queue contains information about store instructions that have not been completed, such as the physical address associated with a store instruction. (Col. 5, Lines 58-60). The store data buffer stores the actual data values to be written to memory by the store instructions contained in the store queue. (Col. 5, Lines 53-54). The bypass mechanism compares the address of a load instruction to the addresses of the store instructions in the store queue. (Col. 6, Lines 6-10). If a match is found in the store queue, the bypass mechanism uses data from the store data buffer to satisfy the load instruction. (Col. 6, Lines 10-12). In this way, the computer system need not access the memory to satisfy the load instruction.

Webb lacks any mention of detecting an instruction "without computing an external memory address" as asserted in the Office Action. In order to implement the bypass functionality, Webb expressly teaches that an external memory address must be computed before

the store queue and store data buffer are accessed. (Col. 6, Lines 3-6). The external memory address is then used to determine whether the store queue contains needed information. (Col. 6, Lines 6-10). As a result, Webb fails to disclose, teach, or suggest detecting an instruction that loads data from a first memory location "without computing an external memory address of [the] first memory location" as recited in Claims 2 and 12.

For these reasons, the proposed *Amerson-Webb* combination fails to disclose, teach, or suggest the Applicant's invention recited in Claims 2 and 12. Accordingly, the Applicant respectfully requests withdrawal of the § 103(a) rejection and full allowance of Claims 2 and 12.

III. <u>CONCLUSION</u>

As a result of the foregoing, the Applicant asserts that all pending claims in the application are in condition for allowance and respectfully requests an early allowance of such claims.

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SUMMARY

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to indicated telephone number below contact undersigned wmunck@davismunck.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208. No extension of time is believed to be necessary. If an extension of time is needed, however, the extension is requested. Please charge the fee for the extension to Deposit Account No. 50-0208.

Respectfully submitted,

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